CLAIMS

What is claimed is:

1. A mounting system for attaching a colorimeter to a target screen, the system comprising:

an array of suction cups adapted to hold the colorimeter in position on the target screen, each cup in the array having a maximum displacement distance of 0.115 inches or less, thereby enabling positional stability of the colorimeter, the maximum displacement distance defining a distance any one cup will move in transitioning from a fully engaged-state to a fully relaxed-state; and

a baseplate operatively coupled to the array of suction cups, wherein the baseplate is adapted to be operatively coupled to a housing of the colorimeter or is part of the colorimeter housing.

2. The system of claim 1 wherein the array of suction cups is integral with the baseplate.

3. The system of claim 2 wherein the array of suction cups is bonded to the baseplate.

4. The system of claim 1 further comprising:

a sensor hole located in the array, so as to allow sensors of the colorimeter to receive light emitted from the target screen; and

a sensor shield located about the sensor hole, and adapted to shield sensors of the colorimeter from extraneous light generated by sources other than the target screen.

5. The system of claim 4 wherein the sensor shield is formed as an integral part of the array using injection molding techniques.

6. The system of claim 1 further comprising:

one or more rigid stops located on the array, so as to establish a pre-set distance of the colorimeter to the target screen, each stop having a height that allows each of the suction cups to be fully seated.

7. The system of claim 6 wherein the one or more rigid stops are formed as an integral part of the array using injection molding techniques.

8. The system of claim 1 wherein the array is a single piece of injection moldable elastomer or rubber.

9. The system of claim 1 wherein the array includes an inner group of suction cups and an outer group of suction cups, and is a single piece of injection moldable elastomer or rubber.

10. The system of claim 9 wherein the inner and outer groups of suction cups are each arranged in respective rings, with each group having ten or more suction cups each having a maximum diameter of 0.250 inches or less.

11. The system of claim 1 wherein each suction cup has a maximum cup diameter of 0.250 inches or less.

12. A mounting system for attaching a colorimeter to a target screen at a pre-set distance, the system comprising:

an injection molded array of suction cups adapted to hold the colorimeter in position on the target screen, and to control both the pre-set distance and variation of distance between the colorimeter and the target screen, the array including an inner group of suction cups and an outer group of suction cups;

a sensor hole located in the array, so as to allow sensors of the colorimeter to receive light emitted from the target screen; and

a sensor shield located about a sensor hole located in the array, and adapted to shield sensors of the colorimeter from extraneous light generated by sources other than the target screen.

13. The system of claim 12 wherein the array, sensor hole, and sensor shield are a single piece of injection moldable elastomer or rubber.

14. The system of claim 12 wherein the array includes one or more rigid stops that operate to establish the pre-set distance of the colorimeter to the target screen, each stop having a height that allows each of the suction cups to be fully seated.

15. The system of claim 12 wherein each cup in the array has a maximum displacement distance of 0.115 inches or less, thereby enabling positional stability of the colorimeter, the maximum displacement distance defining a distance any one cup will move in transitioning from a fully engaged-state to a fully relaxed-state.

16. The system of claim 15 wherein each suction cup has a maximum cup diameter of 0.250 inches or less.

17. The system of claim 12 further comprising:

a baseplate operatively coupled to the array of suction cups, wherein the baseplate is adapted to be operatively coupled to a housing of the colorimeter or is part of the colorimeter housing.

18. The system of claim 17 wherein the baseplate is rigid and the system further includes a pull tab operatively coupled to one end of the baseplate and a pivot point at an opposite end, thereby allowing the mounting system to be cantilevered off of the target screen during removal.

19. A mounting system for attaching a device to a target surface, the system comprising:

an array of suction cups adapted to hold the device in position on the target surface, each cup in the array having a maximum displacement distance of 0.115 inches or less, thereby enabling positional stability of the device, the maximum displacement distance defining a distance any one cup will move in transitioning from a fully engaged-state to a fully relaxed-state; and one or more rigid stops that operate to establish a pre-set distance of the device to the target surface, each stop having a height that allows each of the suction cups to be fully seated.

20. The system of claim 19 wherein each suction cup has a maximum cup diameter of 0.250 inches or less.

21. The system of claim 19 wherein the device is a colorimeter and the target surface is a screen, the system further comprising:

a sensor hole located in the array, so as to allow sensors of the colorimeter to receive light emitted from the target screen; and

a sensor shield located about a sensor hole located in the array, and adapted to shield sensors of the colorimeter from extraneous light generated by sources other than the target screen.

22. The system of claim 21 wherein the array, the sensor shield, and the one or more rigid stops are a single piece of injection moldable elastomer or rubber.

23. The system of claim 19 further comprising:

a baseplate operatively coupled to the array of suction cups, wherein the baseplate is adapted to be operatively coupled to a housing of the device or is part of the device housing.

24. The system of claim 23 wherein the baseplate is rigid and the system further includes a pull tab operatively coupled to one end of the baseplate and a pivot point at an opposite end, thereby allowing the mounting system to be cantilevered off of the target surface during removal.

25. A mounting system for attaching a sensor to a target surface, the system comprising:

an array of suction cups adapted to hold the sensor in position on the target surface, each cup in the array having a maximum displacement distance of 0.115 inches or less, thereby enabling positional stability of the sensor, the maximum displacement distance defining a distance any one cup will move in transitioning from a fully engaged-state to a fully relaxed-state; and

a baseplate operatively coupled to the array of suction cups, wherein the baseplate is adapted to be operatively coupled to a housing of the sensor or is part of the sensor housing.